



test PMSD < PMSD lower bound value  
Dave McDonald to: Joy Hilton

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Hi Joy, attached is an example of using the RPD to calculate a test NOEC when the test PMSD is lower than lower PMSD bound value. When a particular test results in this situation this is an example of what one should do to determine the NOEC value for the test. In this situation a permittee effluent would be considered passing. Any questions let me know.



Determining the NOEC where the test PMSD is lower than the lower PMSD bound for the non.doc

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**Determining the NOEC where the test PMSD is lower than the lower PMSD bound for the non-lethal endpoint of interest e. reproduction or growth.**

1. Calculate the relative differences from control  
 $RPD = [(control\ mean - treatment\ mean) \div (control\ mean)] \times 100.$
2. Determine which relative differences exceed the PMSD lower bound which in this example is 11.
3. The NOEC is the highest RPD that does not exceed the lower bound PMSD.

Treatment	Mean # of neonates	Relative percent difference	Greater than the Lower PMSD
100%	5.08	82	Y
50%	12.4	56	Y
25%**	23.4	17	Y
12.5% (IWC)	25.3	10	N
6.25%	26.1	7.4	N
Control	28.2	0	N

Lower PMSD bound = 11

Treatment with a mean RPD less than the lower bound value would be in this case considered not significantly different from the control i.e. 12.5%.